# State of California CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD Los Angeles Region 320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles, California

# FACT SHEET WASTE DISCHARGE REQUIREMENTS for SOUTHERN CALIFORNIA EDISON COMPANY (Port Hueneme Fuel Oil Supply Facility)

NPDES Permit No.: CA0057932 Public Notice No.: 02-051

FACILITY ADDRESS
Port Hueneme Fuel Oil Facility
200 West Clara Street
Port Hueneme, CA 93431

FACILITY MAILING ADDRESS
Port Hueneme Fuel Oil Facility
2500 E. Victoria Street
Compton, CA 90220
Contact: John Slayton
Telephone: (310) 223-1904

# I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

#### A Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4<sup>th</sup> Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on October 7, 2002.

#### B. Public Hearing

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The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: October 24, 2002

Time: 9:00 a.m.

Location: City of Simi Valley, City Council Chambers,

2929 Tapo Canyon Road, Simi Valley, California

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

#### C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of Chief Counsel ATTN: Elizabeth Miller Jennings, Senior Staff Counsel 1001 I Street, 22<sup>nd</sup> Floor Sacramento. CA 95814

# D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

#### E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

#### II. Introduction

Southern California Edison Company (hereinafter SCE or Discharger) discharges wastewater from its Port Hueneme Fuel Oil Supply facility under WDRs contained in Order No. 95-008

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adopted by this Regional Board on January 23, 1995. Order No. 95-008 serves as a NPDES (CA0057932) for this facility. Order No. 95-008 expired on January 10, 2000.

SCE has filed a report of waste discharge and has applied for renewal of its WDRs and NPDES permit on August 23, 2000. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from SCE. A site visit was conducted on September 5, 2002, to observe operations and collect additional data to develop permit limits and conditions.

# III. Description of Facility and Waste Discharge

The Port Hueneme Fuel Oil Supply facility (Facility), a fuel oil storage and supply facility, is located at 200 West Clara Street, Port Hueneme, California. The Facility occupies approximately 10 acres. The Facility consists of three storage tanks (Tank Nos. 1, 2, and 3) in a bermed tank farm area, oil pumping station, direct-fired heater area, and operation building. Currently, only Tank No. 1 is operating, Tank Nos. 2 and 3 had been out of service for the past 5 years. SCE does not plan to re-activate Tank Nos. 2 and 3.

SCE provides temporary storage of fuel oil before it is pumped to an off-site facility. SCE off-loads barges containing oil from their marine terminal, and then pumps a portion of the fuel oil into their storage tanks at the Port Hueneme site for temporary storage.

SCE intermittently discharges up to 216,000 gallons per day of storm water runoff, which may pick up pollutants from diked storage areas into a storm drain on Pacific Street, via Discharge Serial No. 001 (Latitude 34°9′54" North, Longitude 119°12′15" West), thence to Port Hueneme Harbor, a water of the United States. Storm water is collected or pumped into the bermed area of the three oil storage tanks from collection points located throughout the facility. Prior to discharge, representative samples of the wastewater are collected and analyzed for pollutants of concern. If results indicate further processing is necessary, portable/mobile processing units are brought on-site, and the storm water is circulated until the effluent stream meets discharge limits. At that time, the valving is realigned and the off-site discharge begins. The pumping rate will continue to be no more than 216,000 gallons per day, and the "official" sampling will continue to take place within one hour after discharge begins.

The current permit also regulates the discharge of hydrostatic test water. However, there have been no discharges of hydrostatic test water since 1973, only storm water discharges occurred in March 2001. On September 16, 2002, SCE requested that the hydrostatic test water discharge be separated from the storm water discharge. Therefore, this Order regulates only the discharge of storm water runoff.

The Regional Board and the United States Environmental Protection Agency (USEPA) have classified the SCE discharge as a minor discharge.

Effluent limits contained in the existing permit for SCE Discharge Serial No. 001 and representative monitoring data from the previous permit term are presented in the following table:

Constituent (units)	Effluent Limit (Daily Maximum)	Monitoring Data	(January 1995 – March 2001)	
		Maximum	No. of Exceedances	
Oil and Grease (mg/L)	15			
Phenols (mg/L)	1.0	3.2 <sup>1</sup>	1	
Acute Toxicity (% Survival)	2	100		
pH (standard units)	Between 6.0 and 9.0	8.11		

<sup>&</sup>lt;sup>1</sup> This value exceeded permit limitations.

Monitoring data is available from four discharge events. The facility has not discharged through the NPDES outfall since March 2001. The effluent monitoring data show that maximum concentrations for phenols exceeded the existing daily maximum permit limitations of 1.0 mg/L, on March 19, 2001. These violation is being evaluated for appropriate enforcement action.

# IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

- The federal Clean Water Act (CWA). The CWA requires that any point source discharges
  of pollutants to a water of the United States must be done in conformance with an NPDES
  permit. NPDES permits establish effluent limitations that incorporate various
  requirements of the CWA designed to protect water quality.
- Title 40, Code of Regulations (40 CFR) Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limits for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limits for certain pollutants discharged by SCE.
- 3. On June 13, 1994, the Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The Basin Plan contains beneficial uses and water quality objectives for Port Hueneme Harbor.

Existing: industrial process supply, navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, and wildlife habitat.

<sup>&</sup>lt;sup>2</sup> Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

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- 4. The State Water Resources Control Board (State Board) adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for Port Hueneme Harbor.
- 5. On May 18, 2000, the U.S. Environmental Protection Agency (USEPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR § 131.38]. In the CTR, USEPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10<sup>-6</sup>), for all priority toxic pollutants regulated as carcinogens. The CTR also provides a schedule of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with the CTR criteria.
- 6. 40 CFR section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality-based effluent limits (WQBELs) may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.
- 7. State and Federal antibacksliding and antidegradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in section 402(o) of the CWA and in the Title 40 of the Code of Federal Regulations (40 CFR), section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.
- 8. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Port Hueneme Harbor.
- 9. Existing waste discharge requirements contained in Board Order No. 95-008, adopted by the Regional Board on January 23, 1995. In some cases, permit conditions (effluent limits and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

#### V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional,

nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet water quality-based effluent limitations (WQBELs) that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.
- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges that composed entirely of storm water, such as the potential discharges to inland surface waters, enclosed

bays, and estuaries, the USEPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (USEPA/505/2-90-001) establishes procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by USEPA through the CTR and NTR, as well as the Basin Plan. With respect to a reasonable potential analysis, the TSD identifies an appropriate step-wise approach that can be used to determine whether a discharge has a reasonable potential. The approach used in the TSD is equally valid for determining the reasonable potential for discharges not comprised entirely of storm water discharges.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

# 1. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Effluent limitations for Discharge Serial No. 001 in the current permit were established for phenols because they are typical components of the petroleum products stored on-site, specifically bunker fuel oil. Storm water runoff may also pick up oil and grease from incidental spillage during fuel transfer, and thus oil and grease and pH are likely to impact the discharge. Therefore, effluent limitations for oil and grease, phenols, and pH are established in this permit. Total suspended solids (TSS), turbidity, BOD<sub>5</sub>, and settleable solids are parameters typically used to characterize wastewater; thus effluent limitations for these parameters have been established in this permit. Sulfides may be found in fuel oil, and thus may be present in the discharge. Therefore, effluent limitations for sulfides have been established.

#### 2. Technology-Based Effluent Limits

This permit will require the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Due to the fact that storm water discharges do occur at the SCE facility, this permit will require that SCE develop and implement a SWPPP.

Due to the lack of national ELGs for tank farm facilities and the absence of data available to apply BPJ, and pursuant to 40 CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a Best Management Practices Plan (BMPP). The combination of the SWPPP and BMPP and existing permit limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent

limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

#### 3. Water Quality-Based Effluent Limits

As specified in 40 CFR § 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or USEPA water quality criteria contained in the CTR and NTR). The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the TSD for storm water discharges. Further, in the best professional judgment of the Regional Board staff the TSD identifies an appropriate, rational step-wise approach that can be used to determine whether storm water discharges have a reasonable potential.

## (a) Reasonable Potential Analysis (RPA)

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

There is insufficient monitoring data available to perform RPA to the priority pollutants. The TSD requires the dischargers to submit sufficient data to conduct the determination of priority pollutants requiring WQBELs and to calculate the effluent limitations. This permit includes an interim monitoring requirements to obtain the necessary data.

#### (b) Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 5.4 of the TSD. These procedures include:

1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

- 2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
- 3) Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

#### (c) Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA has approved the State's 303(d) list of impaired water bodies. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 1998 303(d) list and have been scheduled for TMDL development.

Port Hueneme Harbor is a medium-sized deepwater harbor located within the Ventura Coastal Watershed. The 1998 State Board's California 303(d) List classifies Port Hueneme Harbor as impaired. The pollutants of concern detected in the water column, in the sediment, and in the fish tissue, include elevated levels of PAHs, DDT, PCBs, TBT, and zinc. Known and/or suspected sources of pollution include urban and agricultural runoff, septic tanks, abandoned wells, seawater intrusion, mining operations, and storm water.

#### (d) Whole Effluent Toxicity

Whole Effluent Toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing permit contains acute toxicity limitations and

monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this Order includes acute toxicity limitations.

The discharges at the SCE facility occur only after a significant storm event; they are not continuous. The discharge at the SCE facility is not expected to contribute to long-term toxic effects. Intermittent discharges are likely to have short-term toxic effects; therefore at this facility, SCE will be required to continue to conduct acute toxicity testing in accordance with the existing permit requirements.

# 4. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limitations standards or conditions in re-issued permits are at least as stringent as in the existing permit. The Regional Board has determined that reasonable potential exists for all pollutants that are regulated under the current permit; therefore effluent limitations have been established for these pollutants. Furthermore, the requirements in the proposed Order for oil and gease and phenols shown in the table below, are based on limits specified in SCE's existing permit. The effluent limitations for pH and temperature are based on the Basin Plan.

The following table presents the effluent limitations and the specific rationales for pollutants that are expected to be present in the discharge:

	Discharge Limitations	Rationale

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		Monthly Average	Daily Maximum	
Total Suspended Solids	Mg/L	50	75	BPJ
Turbidity	NŤU	50	75	BPJ
BOD <sub>5</sub> 20°C	Mg/L	20	30	BPJ
Oil and Grease	Mg/L	10	15	E
Sulfides	Mg/L		1.0	BPJ
Phenols	Mg/L		1.0	Е

BPJ = Best Professional Judgement

E = Existing permit limit

# 5. Monitoring Requirements

For regulated parameters, the previous permit for SCE required monitoring once per discharge event for flow, temperature, pH, and oil and grease. Annual monitoring for toxicity and phenols was required under the previous permit. The previous permit did not require monitoring for priority pollutants. According to Section 3.2 of the TSD, if data are unavailable or insufficient to conduct the RPA, the Regional Board must establish interim requirements that require additional monitoring for the pollutants in place of a WQBEL. Upon completion of the required monitoring, the Regional Board must use the gathered data to conduct the RPA and determine if a WQBEL is required. As prescribed in the Monitoring and Reporting Program, the Regional Board shall require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

# (a) Effluent Monitoring

To assess the impact of the discharge to the beneficial uses of the receiving waters, the Discharger is required to monitor the conventional and priority pollutants. Monitoring of these pollutants will characterize the wastes discharged.

# (b) Effluent Monitoring for Reasonable Potential Determination

In accordance with the TSD, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required, and (2) to calculate effluent limitations, if required. Therefore, the Discharger will be required to conduct an interim monitoring program for all CTR priority pollutants until August 2004. As described in the Monitoring and Reporting Program, monitoring reports must be submitted quarterly.

#### (c) Storm Water Monitoring and Reporting

The Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges of all storm water discharge locations to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity and odor. Furthermore, the Discharger shall implement the Storm Water Pollution Prevention Plan Requirements (SWPPP) as is enumerated in Attachment M of the WDR Order No. R4-2002-0170.

# (d) Receiving Water Monitoring

SCE is required to perform general observations of the receiving water when discharges occur and report the observations in the quarterly monitoring report. The Regional Board in assessing potential impacts of future discharges will use data from these observations. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations are required:

- Tidal stage, time, and date of monitoring;
- Weather conditions;
- Color of water:
- Appearance of oil films or grease, or floatable materials;
- Extent of visible turbidity or color patches;
- Direction of tidal flow:
- Description of odor, if any, of the receiving water; and
- Presence and activity of California Least Tern and California Brown Pelican.